



AT&T CORP.

**3450 Riverwood Parkway SE, Room 162
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2017 Fiscal Year (FY)

Annual Standards and Specifications:

Erosion and Sediment Control (ESC)

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Stormwater Management (SWM)

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i: Abbreviations and Acronyms

BMP	Best Management Practice
CBPA	Chesapeake Bay Preservation Act
CGP	Construction General Permitting
DEQ	Virginia Department of Environmental Quality
ESC	Erosion & Sediment Control
HUC	Hydrologic Unit Code
LDA	Land Disturbing Activity
NOT	Notice of Termination
RLD	Responsible Land Disturber
SWM	Stormwater Management
SWMA	Stormwater Management Act
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VAC	Virginia Administrative Code
VESCH	Virginia Erosion & Sediment Control Handbook
VESCP	Virginia Erosion and Sediment Control Program
VPDES	Virginia Pollution Discharge Elimination System
VSMP	Virginia Stormwater Management Program

1.0 Introduction

AT&T Corp. is a telecommunications systems operator providing service through buried and above ground cable. As a part of maintenance and system improvements, AT&T will install, remove, repair, and relocate cabling and related facilities in order to service its customers and respond to community needs. The purpose of this document is to describe the nature of this work and how the work will comply with Commonwealth of Virginia requirements for stormwater management, and erosion and sediment control.

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2.0 Definitions

SWM (Stormwater Management)/ESC (Erosion and Sediment Control) “Land disturbance” or “Land-disturbing activity” means a man-made change to the land surface that may result in soil erosion or has the potential to change its runoff characteristics, including construction activity such as the clearing, grading, excavating, or filling of land.

SWM “Measurable storm event” means a rainfall event producing 0.25 inches of rain or greater over 24 hours.

ESC “Periodic inspections” means provisions for an inspection during or immediately following initial installation of erosion and sediment controls, at least once in every two-week period, within 48 hours following any runoff producing storm event, and at the completions of the project prior to release of any performance bond.

SWM “Prior developed lands” means land that has been previously utilized for residential, commercial, industrial, institutional, recreation, transportation, or utility facilities or structures, and that will have the impervious area associated with those uses altered during a land-disturbing activity.

SWM “Predevelopment” refers to the conditions that exist at the time that plans for the land development of a tract of land are submitted to the Virginia Stormwater Management Program (VSMP) authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being submitted shall establish predevelopment conditions.

SWM “Qualified personnel” means a person knowledgeable in the principles and practices of erosion and sediment and stormwater management controls who possesses the skills to assess conditions at the construction site for the operator that could impact stormwater quality and quantity and to assess the effectiveness of any sediment and erosion control measures or stormwater management facilities selected to control the quality and quantity of stormwater discharges from the construction activity. For VSMP authorities this requires the use of a person who holds a certificate of competency from the board in the area of project inspection for ESC and project inspection for SWM or combined administrator for ESC and combined administrator for SWM as defined in 9VAC25-850-10 or a combination of ESC and SWM qualifications from these two areas.

DEQ-Certified Program Administrator (ESC and SWM) is the person or persons responsible for administering and enforcing the Virginia Erosion and Sediment Control Program (VESCP) or VSMP of a

VESCP authority or VSMP authority as may be applicable in the areas of ESC or SWM, holding a certificate of competence from the Department of Environmental Quality (DEQ).

DEQ-Certified Plan Reviewer (ESC and SWM) is an employee or agent of a VESCP authority who: holds a certificate of competence from the DEQ in the classification of plan reviewer in the area of ESC or SWM; is licensed as a professional engineer, architect, certified landscape architect, or land surveyor pursuant to Article 1 of Chapter 4 of Title 54.1 of the Code of Virginia; or is a professional soil scientist as defined in Chapter 22 of Title 54.1 of the Code of Virginia. Plan Reviewer for SWM is an employee or agent of a VESCP authority who holds a certificate of competence from the DEQ in the classification of plan reviewer in the area of SWM. The DEQ-Certified Plan reviewer is responsible for determining the accuracy of ESC plans and supporting documents or SWM plans and supporting documents as may be applicable to the areas of ESC or SWM.

DEQ-Certified Inspector (ESC and SWM) is an employee or agent of a VESCP authority who holds a certificate of competence from the DEQ in the classification of inspector in the area of ESC or SWM, respectively. The DEQ-Certified Inspector is responsible for periodically examining the ESC or SWM activities and premises of a land-disturbing activity for compliance with the ESC Act and Regulations or SWM Act and Regulations as may be applicable.

DEQ-Certified Responsible Land Disturber (RLD) (ESC and SWM) is an individual holding a certificate issued by the DEQ who is responsible for carrying out the land-disturbing activity in accordance with the approved ESC plan. The RLD may be the owner, applicant, permittee, designer, superintendent, project manager, contractor, or any other project or development team member. The RLD must be designated on the ESC plan or permit as a prerequisite for engaging in land disturbance.

3.0 Applicability of Annual Standards and Specifications

3.01 Land Disturbance Thresholds

3.01.1 ESC – § 62.1-44.15:51."Land-disturbing activity", 9VAC25-840-70.

Under the ESC Law, a land-disturbing activity shall be defined as: Any man-made change to the land surface that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting, and filling of land, except that the term shall not include:

2. Individual service connections;

3. Installation, maintenance, or repair of any underground public utility lines when such activity occurs on an existing hard surfaced road, street, or sidewalk, provided the land-disturbing activity is confined to the area of the road, street, or sidewalk that is hard surfaced;

7. Repair or rebuilding of the tracks, rights-of-way, bridges, communication facilities, and other related structures and facilities of a railroad company;

9. Disturbed land areas of less than 10,000 square feet in size or 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations; however, the governing body of the program authority may reduce this exception to a smaller area of disturbed land or qualify the conditions under which this exception shall apply;

10. Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles;
12. Emergency work to protect life, limb, or property, and emergency repairs; however, if the land-disturbing activity would have required an approved erosion and sediment control plan, if the activity were not an emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of the VESCP authority.

3.01.2 SWM – § 62.1-44.15:24. and :34, 9VAC25-870-10. “Land-disturbing activity”, “Small construction activity”, “Construction activity” and “Large construction activity”

Under the SWM Act, a land-disturbing activity shall also be defined as: a man-made change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation, except that the term shall not include the following, unless required by federal law:

1. Permitted surface or deep mining operations and projects, or oil and gas operations and projects conducted under the provisions of Title 45.1;
4. Land-disturbing activities that disturb less than one acre of land area except for land-disturbing activity exceeding an area of 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the provisions of the Chesapeake Bay Preservation Act or activities that are part of a larger common plan of development or sale that is one acre or greater of disturbance; however, the governing body of any locality that administers a VSMP may reduce this exception to a smaller area of disturbed land or qualify the conditions under which this exception shall apply;
5. Discharges to a sanitary sewer or a combined sewer system;
7. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving of an existing road with a compacted or impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance if performed in accordance with this subsection; and
8. Conducting land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, the VSMP authority shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements of subsection A is required within 30 days of commencing the land-disturbing activity.

3.01.3 CBPA - § 62.1-44.15:34.E.2.

3.02 Off-site Area Permit Status

3.02.1 SWM – 9VAC25-880-30.C.

There are not expected to be any support activities (e. g., concrete or asphalt batch plants, excavated material disposal areas, borrow areas) that are not part of a separate commercial operation, where the individual entity will be operating

under their own pollution prevention plan in strict compliance with best management practices (BMPs) necessary at those sites consistent with applicable codes and the referenced administrative regulation. Equipment staging areas, material storage areas, worker parking areas, etc. will have appropriate control measures identified in this document and implemented to address stormwater discharges from these areas.

3.02.2 ESC – **9VAC25-840-80.D.**

The VESCP authority may consider the off-site activity as part of the proposed land-disturbing activity for land-disturbing activities at a separate location, including but not limited to borrow and disposal areas. The VESCP authority may also require proof of approval for off-site activities already covered by an approved erosion and sediment control plan and certification that the plan will be implemented in accordance with applicable codes and the referenced administrative regulation.

3.03 Subject to Annual Standards and Specifications

SWM – **§ 62.1-44.15:31.B.** Linear projects subject to annual standards and specifications include:

1. Construction, installation, or maintenance of electric transmission, natural gas, and telephone utility lines and pipelines, and water and sewer lines; and
2. Construction of the tracks, rights-of-way, bridges, communication facilities, and other related structures and facilities of a railroad company.

The types of projects that AT&T will construct under these Annual Standards and Specifications in Virginia include duct and cable relocations and coaxial removal and/or relocation as part of new developments, drainage improvements, roadway improvements, and storm drain construction. These proposed linear projects consist of boring and trenching and backfilling at the respective sites. AT&T will report the overall land-disturbing activities to DEQ on a quarterly basis in this Annual Standards and Specifications. For information on anticipated projects for 2017 FY, please refer to the table below.

Project Name	Project Location	Project Manager	Project Description	Linear Footage
Brambleton	Ashburn, VA	Gary Wigfield 301-874-1180	Cable relocation due to new development, bridge construction and road construction. 8-1.5" HDPE Ducts to be placed, two MH's, two Pullboxes to be placed	TBD, possible 500-foot bore
Ridge Rd Mecklenburg	Mecklenburg, VA	Gary Wigfield 301-874-1180	Remove coax for road project, minor project.	100 feet (ft) in length
VDOT Cartier Gallier	Powhatan, VA	Gary Wigfield 301-874-1180	Relocate cable around VDOT proposed drainage improvements	700 ft in length

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Project Name	Project Location	Project Manager	Project Description	Linear Footage
Poplar Manor Estates	Fredericksburg, VA	Gary Wigfield 301-874-1180	Remove coax for road project, minor project	180 ft in length
Route 10 Widening Phase II	Chester, VA	Gary Wigfield 301-874-1180	Relocation of AT&T cable and conduit to allow for VDOT roadway improvements	Approximately 10,900 ft of new duct and cable
Thompson Property	Oakton, VA	Gary Wigfield 301-874-1180	Relocate Duct and cable to allow for developer improvements	730 ft in length (Complete)
Catharpin Trail	Gainsville, VA	Gary Wigfield 301-874-1180	Remove coax for developer walkway project	420 ft in length
VDOT Route 24 at 646	Concord, VA	Gary Wigfield 301-874-1180	Relocate Duct and Cable to allow for VDOT roundabout and drainage improvements	900 ft in length
Dulles summit Cable Hit	Sterling, VA	Gary Wigfield 301-874-1180	Repair and restoration of damaged AT&T facilities. Replace damaged duct	bore and trench, 380 ft in length
VDOT 29 at MKR 587	Chatham, VA	Gary Wigfield 301-874-1180	Contractor to adjust manhole lid to allow for proposed roadway improvements	1 manhole adjustment
Cascades Overlook	Sterling, VA	Gary Wigfield 301-874-1180	Horizontal Shift of AT&T to allow for Developer Storm Drain improvements	60 ft in length
Rte 50 at Aspen Lane	Falls Church, VA	Gary Wigfield 301-874-1180	Horizontal Shift of AT&T to allow for VDOT Storm Drain Construction	200 ft in length
Rte 10 at 301	Chester, VA	Gary Wigfield 301-874-1180	VDOT Road Widening, four conflicts	Two lower in place sections 100 ft total. Two bores, one 250 ft, one 850 ft

4.0 DEQ-Certified Personnel

4.01 ESC and SWM Certification Regulations – 9VAC25-850

4.02 DEQ-Certified Program Administrator (ESC and SWM)

The DEQ-Certified Program Administrator is the person or persons responsible for administering and enforcing the VESCP or VSMP of a VESCP authority or VSMP authority as may be applicable in the areas of ESC or SWM, holding a certificate of competence from the DEQ.

4.03 DEQ-Certified Plan Reviewer (ESC and SWM)

Plan Reviewer for ESC is an employee or agent of a VESCP authority who: holds a certificate of competence from the DEQ in the classification of plan reviewer in the area of ESC; is licensed as a professional engineer, architect, certified landscape architect, or land surveyor pursuant to Article 1 of Chapter 4 of Title 54.1 of the Code of Virginia; or is a professional soil scientist as defined in Chapter 22 of Title 54.1 of the Code of Virginia. Plan Reviewer for SWM is an employee or agent of a VESCP authority who holds a certificate of competence from the DEQ in the classification of plan reviewer in the area of SWM. The DEQ-Certified Plan reviewer is responsible for determining the accuracy of ESC plans and supporting documents or SWM plans and supporting documents as may be applicable to the areas of ESC or SWM.

4.04 DEQ-Certified Inspector (ESC and SWM)

Inspector for ESC or SWM is an employee or agent of a VESCP authority who holds a certificate of competence from the DEQ in the classification of plan reviewer in the area of ESC or SWM, respectively. The DEQ-Certified Inspector is responsible for periodically examining the ESC or SWM activities and premises of a land-disturbing activity for compliance with the ESC Act and Regulations or SWM Act and Regulations as may be applicable.

4.05 DEQ-Certified Responsible Land Disturber (ESC and SWM)

The DEQ-Certified RLD is an individual holding a certificate issued by the DEQ who is responsible for carrying out the land-disturbing activity in accordance with the approved ESC plan. The RLD may be the owner, applicant, permittee, designer, superintendent, project manager, contractor, or any other project or development team member. The RLD must be designated on the ESC plan or permit as a prerequisite for engaging in land disturbance.

4.06 Entering into contracts

AT&T may enter into agreements or contracts with soil and water conservation districts, adjacent localities, or other public or private entities to carry out or assist with the responsibilities of these Annual Standards and Specifications.

5.0 Administration

5.01 Plan Review Process

AT&T is responsible for plan review.

- The plans will be developed under the supervision of a professional engineer licensed to practice engineering in the Commonwealth of Virginia. These plans will adhere to the standards prescribed in this document.
- The plans will be reviewed by an individual who has completed the DEQ certification process for Plan Reviewer. The Plan Reviewer will compile a comment letter of deficiencies, if any, and issue back to the plans developer.
- The plan developer will address deficiencies and resubmit for review. This process will continue until the Plan Reviewer is satisfied that the plans meet the standards laid out in this document.
- Once the plans have been deemed satisfactory by the Plan Reviewer, an individual who has completed the Program Administrator requirements will submit all necessary documentation to the DEQ. The Program Administrator will act as the point of contact throughout the project.
- An RLD, holding a valid RLD Certification, shall be named for each project over 10,000 square feet in area in non-tidewater areas and for each disturbed area greater than 2,500 square feet in tidewater areas. Typically this certification is held by the project contractor or construction supervisor.

5.01.1 SWM Plans – **9VAC25-870-108**

Project-specific plans include the following elements in accordance with 9VAC25-870-55:

- Type and location of stormwater discharges, stormwater features to which stormwater is being discharged, predevelopment and postdevelopment drainage areas
- Owner contact information
- Description of current site conditions and final site conditions
- Description of proposed stormwater management facilities
- Type, location, acres treated, and surface waters for discharges for proposed stormwater management facilities
- Hydrologic and hydraulic computations
- Calculations verifying water quality and quantity compliance
- Maps depicting topography, contributing drainage areas, existing surface waters, soil types, vegetative areas, current land use, adjoining parcels, limits of disturbance, proposed drainage patterns, buildings, roads, utilities, and stormwater management facilities, and proposed land use tabulation.

5.01.2 ESC Plans - **§ 62.1-44.15:55. (Refer to VESCH Chapter 6)**

No person shall engage in any land-disturbing activity until he has submitted to the VESCP authority an erosion and sediment control plan for the land-disturbing activity and the plan has been reviewed and approved.

Following review for completeness and accuracy, e-notification will be completed per section 14.01. AT&T will notify DEQ two weeks prior to performing any land-disturbing activities.

5.02 CGP Permitting Process

The following information will be submitted to the DEQ. The DEQ is the authority and issuance and termination of Construction General Permitting (CGP) shall go through the Department.

5.02.1 Registration Statement – **9VAC25-880-50**

The operator shall submit a registration statement prior to the commencement of land disturbance to the VSMP authority that shall contain the following information:

1. Name, contact, mailing address, telephone number, and email address if available of the construction activity operator. No more than one operator may receive coverage under each registration statement; NOTE: General permit coverage will be issued to this operator, and the certification must be signed by the appropriate person associated with this operator.
2. Name and location if available of the construction activity and all off-site support activities to be covered under this general permit, including city or county, and latitude and longitude in decimal degrees;
3. Status of the construction activity: federal, state, public, or private;
4. Nature of the construction activity (e. g., commercial, industrial, residential, agricultural, oil and gas, etc.);
5. Name of the receiving water(s) and HUC;
6. If the discharge through a municipal separate storm sewer system, the name of the municipal separate storm sewer system operator;
7. Estimated project start date and completion date;
8. Total land area of development and estimated area to be disturbed by the construction activity (to the nearest one-hundredth of an acre);
9. Whether the area to be disturbed by the construction activity is part of a larger common plan of development or sale;
10. A stormwater pollution prevention plan (SWPPP) must be prepared in accordance with the requirements of the General Virginia Pollution Discharge Elimination System (VPDES) Permit for Stormwater Discharges from Construction Activities prior to submitting the registration statement. By signing the registration statement the operator certifies that the SWPPP has been prepared; and
11. The following certification: "I certify under penalty of law that I have read and understand this registration statement and that this document and all attachments were prepared in accordance with a system designed to assume that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

5.02.2 Termination – **CGP Part I.F.**

The notice of termination (NOT) shall be submitted no later than 30 days after one of the conditions within 9VAC25-880-60.A is met. The NOT shall contain the following information:

1. Name, contact, mailing address, telephone number, and email address if available of the construction activity operator.

2. Name and location if available of the construction activity covered under this general permit, including city or county, and latitude and longitude in decimal degrees.
3. The general permit registration number.
4. The basis for submission of the NOT.
5. Where applicable, a list of the on-site and off-site permanent control measures (both structural and nonstructural) that were installed to comply with the stormwater management technical criteria. For each permanent control measure that was installed, the following information shall be included:
 - a. The type of permanent control measure installed and the date that it became functional as a permanent control measure;
 - b. The location if available of the permanent control measure, including city or county, and latitude and longitude in decimal degrees;
 - c. The receiving water of the permanent control measures; and
 - d. The number of total and impervious acres treated by the permanent control measure (to the nearest one-tenth of an acre).
6. Where applicable, the following information related to participation in a regional stormwater management plan. For each regional stormwater management facility, the following information shall be included:
 - a. The type of regional facility to which the site contributes;
 - b. The location if available of the regional facility, including city or county, and latitude and longitude in decimal degrees; and
 - c. The number of total and impervious site acres treated by the regional facility (to the nearest one-tenth of an acre).
7. Where applicable, the following information related to perpetual nutrient credits that were acquired in accordance with § 62.1-44.15:35 of the Code of Virginia:
 - a. The name of the nonpoint nutrient credit generating entity from which perpetual nutrient credits were acquired; and
 - b. The number of perpetual nutrient credits acquired (lbs per acre per year).
8. The following certification: “I certify under penalty of law that I have read and understand this notice of termination and that this document and all attachments were prepared in accordance with a system designed to assume that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.”

A final follow-up inspection is required after NOT approval.

5.03 Record Retention

5.03.1 SWM Recordkeeping – 9VAC25870-126.B.

5.04 Violations and Enforcement Actions

5.04.1 SWM – 9VAC25-870-116

AT&T will conduct specific activities to ensure enforcement of these Annual Standards and Specifications, including training/education verification, audits and surveillances, and finally, issuance of work stoppages, if necessary. AT&T will ensure project personnel have the required experience, training, education, and qualifications for a project prior to contract awards.

AT&T will conduct a minimum of one audit annually in accordance with company procedures on work practices, documentation, plan compliance, records, inspections, and corrective actions from inspections. In addition, surveillances will be performed on a routine basis as determined by the AT&T construction management personnel in accordance with company procedures. Audits and surveillances will be used to verify compliance with these Annual Standards and Specifications, design plans, specifications and drawings, environmental, regulatory, quality assurance, site-specific and corporate requirements, project procedures, and corporate procedures. The construction management or responsible person will address Findings identified during Audits and Surveillances by identifying corrective action taken in accordance with company procedures. The Auditee will address Findings identified during an Audit by identifying corrective actions and by performing a root cause analysis as defined in company procedures. Assessments will be conducted as needed, based on the significance of work activities, level of quality required to meet program objectives, and status of nonconformances and corrective actions previously identified.

Finally, if work is deemed unsafe to people, property, and/or the environment, AT&T will issue a work stoppage until resolution to the satisfaction of construction management personnel has been achieved. If multiple work stoppages are required on the same project, AT&T will implement a system of Hold Points and Releases in order to fulfill the work in accordance with all appropriate requirements.

6.0 Variances, Exemptions, Decline to Permit

For projects where more than 500 ft of open trenching at one time is anticipated, or any project with a site-specific variance, AT&T will submit the appropriate variance request to the DEQ through the project's Program Administrator. The following information is required for submission of variance requests to the Department for review on a project-specific basis.

6.01 Variance requests will be considered freestanding of this Annual Standard and Specification submission and on an individual project-specific basis.

The following information needs to be included in variance requests:

- i. Introduction
- ii. Project Description
- iii. Minimum Standards Variance Requests
- iv. Existing Conditions and Adjacent Areas
- v. Soil Characterization
- vi. Critical and Sensitive Areas (Karst, wetland, etc...)
- vii. Mitigation
 1. ESC Measures
 2. Permanent Stabilization
 3. Vegetative Restoration
 4. Maintenance

- 5. Critical and Sensitive Areas
- viii. Self-Inspection, Reporting and DEQ-Certified Personnel

6.02 SWM – § 62.1-44.15:34.F.

The above referenced section defines the activities not required to comply with the SWM requirements within the VSMP.

6.03 ESC – § 62.1-44.15:55.F.

The above referenced section defines the activities not required to comply with the ESC requirements within the VESCP.

6.04 ESC – 9VAC25-840-50.

Information in the above referenced Erosion and Sediment Control Regulations details the ESC variance request process.

6.05 Guidance Memo No. 15-2003 – Postdevelopment Stormwater Management Implementation Guidance for Linear Utility Projects under the Virginia Stormwater Management Program Regulation, 9VAC25-870
<http://www.deq.virginia.gov/Portals/0/DEQ/Water/Guidance/152003.pdf>

- i. Please note that the following projects require a SWM plan:*
 - 1. *LDA ≥ 2,500 sf in Chesapeake Bay Preservation Areas.*
 - 2. *LDA ≥ 1 acre in areas outside Chesapeake Bay Preservation Areas.*
- ii. Please note that LDA ≥ 1 acre (or < 1 acre but part of a common plan of development) require coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (Construction General Permit).*
- iii. For projects requesting waiver under GM No. 15-2003, DEQ requires a complete ESC plan and additional water quality calculations be submitted for review; this information must reasonably demonstrate that the project will not significantly change the predevelopment runoff characteristics of the land surface after the completion of construction and final stabilization.*
- iv. If non-significance is determined, then DEQ, at their discretion, may waive the requirement for the preparation and implementation of a stormwater management plan.*
- v. For projects ≥ 1 acre, the construction of aboveground or underground linear utilities may be conducted without requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (Construction General Permit) provided that:*

1. The project does not significantly alter the predevelopment runoff characteristics of the land surface after the completion of construction and final stabilization;
 2. The project is managed so that less than one (1) acre of land disturbance occurs on a daily basis;
 3. The disturbed land where work has been completed is adequately stabilized on a daily basis;
 4. The environment is protected from erosion and sedimentation damage associated with the land disturbing activity;
 5. The owner and/or construction activity operator designs, installs, implements, and maintains pollution prevention measures to:
 - a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters;
 - b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on-site to precipitation and to stormwater;
 - c. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures;
 - d. Prohibit the discharge of wastewater from the washout of concrete;
 - e. Prohibit the discharge of wastewater from the washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials; and
 - f. Prohibit the discharge of fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
 6. The owner and/or construction activity operator provides reasonable assurance to DEQ or the local VSMP Authority that all of the above conditions will be satisfied.
 7. The above conditions shall be incorporated into the erosion and sediment control plan developed for the project.
- vi. ESC plans and calculations shall be submitted to DEQ Central Office for review with a transmittal letter specifically requesting a **SWM Plan waiver** or both a SWM Plan Waiver and a **CGP Decline to Permit letter** under GM No. 15-2003.
 - vii. Projects requesting a Decline to Permit letter for CGP coverage shall submit a Registration Statement alongside the ESC plan.
 - viii. DEQ will evaluate each project on an individual basis.

AT&T may be required to produce documentation of water quantity analysis to demonstrate the applicability of Guidance Memo No. 15-2003. The Department may also request analysis of water quality.

7.0 DEQ Oversight

7.01 Annual Submittal to DEQ – 9VAC25-870-170, 9VAC25-840-30.A.3

7.02 Enforcement

7.02.1 SWM – § 62.1-44.15:27.F.

Enforcement shall be administered by the Department and the Board where applicable in accordance with the provisions of this article.

7.02.2 ESC – § 62.1-44.15:54.E., § 62.1-44.15:56.G.

The Department and the Board, where applicable, shall provide project oversight and enforcement as necessary and comprehensive program compliance review and evaluation.

The Department may take enforcement actions in accordance with this article and related regulations.

7.03 Complaints and Inspections

7.03.1 SWM – § 62.1-44.15:31.E.

The Department shall perform random site inspections or inspections in response to a complaint to assure compliance with this article, the Erosion and Sediment Control Law, and regulations adopted thereunder.

7.04 Fees

7.04.1 SWM – § 62.1-44.15:31.D.

The Department shall assess an administrative charge to cover the costs of services rendered associated with its responsibilities pursuant to this section.

7.04.2 ESC – § 62.1-44.15:55.D

The Board shall have the authority to enforce approved specifications and charge fees equal to the lower of (i) \$1,000 or (ii) an amount sufficient to cover the costs associated with standard and specification review and approval, project inspections, and compliance.

7.05 DEQ Discretionary requirements

Four Discretionary Requirements:

- i. Inspection reports conducted by AT&T as well as complaint logs and complaint responses may be required to be submitted to DEQ.
- ii. AT&T may be required to provide weekly e-reporting to the department's applicable regional office:
 1. Inspection reports;
 2. Pictures;

3. Complaint logs and complaint responses; and
 4. Other compliance documents.
- ii. In addition to AT&T internal plan review, AT&T may (at DEQ’s discretion) be required to submit individual project-specific plans to the DEQ for review and approval.
 - iii. The project-specific plan, DEQ approval, and supporting documents may (at DEQ’s discretion) be required to be posted on AT&T’s website for public view.

8.0 Technical Criteria

8.01 Reference to applicable Laws/Regulations:

- 8.01.1 SWMA – § 62.1-44.15:24. to :50.
- 8.01.2 VSMP Regulations – 9VAC25-870
- 8.01.3 VAR10 General Permit for Discharges of Construction Stormwater – 9VAC25-880
- 8.01.4 ESC Law – § 62.1-44.15:51 to :65
- 8.01.5 ESC Regulations – 9VAC25-840
- 8.01.6 SWM and ESC Certification Regulation (also referenced above) – 9VAC25-850

8.02 SWM Quality and Quantity Requirements

- 8.02.1 Quality Requirements – 9VAC25-870-63 and -65
- 8.02.2 Guidance Memo No. 16-2001 – Updated Virginia Runoff Reduction Method Compliance Spreadsheets – Version 3.0
- 8.02.3 Quantity Requirements – 9VAC25-870-66
- 8.02.4 Grandfathering and Time Limits of Applicability – 9VAC25-870-47 and -48

8.03 ESC Minimum Standards – 9VAC25-840-40 (#1 through #19)

Land-disturbing activities involved in the installation and maintenance of utility lines (including construction access roads to utility equipment) must comply, where applicable, with the 19 Minimum Standards as specified in 9VAC25-840-40 and as contained in Chapter 3, State Minimum Standards and Specifications, of the Virginia Erosion and Sediment Control Handbook, Third Edition 1992, published by the DEQ. The “Std & Spec” number in italics below refers to the corresponding section in the DEQ handbook.

Certified RLD is defined as a person representing the owner who shall be:

- Qualified by having completed the *Responsible Land Disturber Certificate of Competence Program*;
- Authorized by the owner to review, direct, and control land-disturbing activities;
- Knowledgeable about ESC regulations and thoroughly familiar with practices outlined in the Virginia Erosion and Sediment Control Handbook as demonstrated by certification of completion of the Responsible Land Disturbers Course;
- Knowledgeable about relevant construction techniques and practices and thoroughly familiar with the construction site.

Utility Pole Installations

- a. Place spoils on plastic or a tarpaulin to protect the existing vegetation. If there are minimal spoils, this step is not necessary.
- b. Dress spoils onto established vegetation. Remove the spoils and dispose of them properly if the vegetation is not well established.

Clearing and Grading

Where necessary, the ROW will be cleared to allow access, to install vaults (handhole or manholes), to excavate trenches, to plow cable/duct and to directionally bore. Surface vegetation clearing will only occur as necessary. Removal of vegetation will occur when necessary for construction to proceed and after appropriate side slope perimeter and down slope controls are in place. Grubbing will not be performed.

No grading is typically associated with the planned work. Should grading be necessary, topsoil will be stripped from graded areas and stockpiled for use in final grading and permanent stabilization. The stockpile will be stabilized with temporary vegetation to prevent soil loss and sediment transport from the stockpile itself until needed. Temporary and permanent stabilization will occur as early as practicable and consistent with the ESC measures described within Minimum Standard (MS) 1, MS 2, and MS 3 and as applicable to BMP 3.01, 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, 3.37, and 3.38. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. The Certified RLD should visit the site to determine the appropriate method of clearing the proposed route. Sensitive areas should be noted, along with any additional ESC measures. Safety Fence (*BMP 3.01*) should be installed where protection is needed such as for Tree Preservation and Protection (*BMP 3.38*).
- b. Clear the ROW with a mechanical rotary cutter, if possible. In some cases, it may be necessary to hand cut using power saws. When trees are removed, the root mass should be kept intact and the soil left undisturbed, with the intent of keeping soil-disturbing activities to a minimum. If any other method is used, the Certified RLD should employ the applicable ESC measures.

Plowing

For much terrain along private easement or along public ROW that is not near paved roadway surfaces, the conduit bundle would be installed by plow, a method that requires no trench and does not create a spoil pile. The width of direct soil disturbance caused by the direct-burial plow would be approximately one foot, in addition to lesser disturbance from the equipment tracks. Typically MS 1, MS 3, MS 4, , and MS 17 are applicable to this kind of installation and BMP measures that may be employed include 3.02, 3.04, 3.05, 3.06, 3.08, 3.11, 3.39, and applicable erosion control measures identified above. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. Install Construction Entrance/Exit Controls (*BMP 3.02*) at strategic access locations onto the cable easement from paved roadways. When tracked or spilled sediment is observed outside the construction limits on paved or public roadways, it must be removed at least daily. More frequent removal, even continuous removal, may be required in some jurisdictions. Deploy adequate Silt Fence (*BMP 3.05*), Straw Bale Barriers (*BMP 3.04*), and/or Brush Barriers (*BMP 3.06*) on downward side of side slopes as necessary in consideration to the present weather or forecast rainfall events, proximity to water resource areas (streams, wetlands, etc.), and timing of surface restoration.

- b. Backfill open trenches, as well as splice pits and starting and finishing pits, if applicable, as soon as possible.
- c. Compact the plow furrow properly. This compaction may be accomplished by driving a crawler tractor or a heavy vehicle over the plow furrow. Restoration of surface vegetation or other special conditions should be handled on an individual basis, depending on the circumstances involved.
- d. Lime, fertilize, and reseed plow furrow and plow tracks if the ground cover has been significantly denuded as outlined in Site Restoration.
- e. Install Right-of-Way Diversions (*BMP 3.11*) on disturbed slopes as specified by the BMP.

Trenching

Trenching opens an area about 18 in. wide and about 48 to 60 in. deep along the running line. Trenching is generally conducted using a backhoe, or a rubber-tired or tracked excavator. While the trench is 18 in. wide, the total ground disturbance from the installation is about 15 ft wide along the easement including the tracks of the excavating equipment, access, materials handling, and workspace. Ground disturbance is 10 ft along the roadway areas where a paved surface allows for access. Trenching is anticipated where the conduit bundle cannot be placed to depth by the plowing method, such as areas with high rock density, tie-ins, near or within roadway surfaces, or to install manholes and handholes. Typically MS 1, MS 2, MS 3, MS 4, MS 8, MS 16, and MS 17 are applicable to this kind of installation and BMP measures that may be employed include 3.02, 3.04, 3.05, 3.06, 3.08, 3.11, 3.26, 3.39, and applicable erosion control measures identified 2.1 above. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. The Certified RLD should visit the site to determine the appropriate method of clearing the proposed route. Sensitive areas should be noted, along with any additional ESC measures.
- b. Clear the ROW with a mechanical rotary cutter, if possible. In some cases, it may be necessary to hand cut using power saws. When trees are removed, the root mass should be kept intact and the soil left undisturbed, with the intent of keeping soil-disturbing activities to a minimum. If any other method is used, the Certified RLD should employ the applicable erosion and sedimentation control measures.
- c. Trench only the length that can be backfilled within a 24-hour period. No more than 500 linear ft of trench may be opened at one time (MS 16a). When more than 500 linear ft of trench is open at any given time, the plant must be installed in accordance with the following standards in addition to other applicable criteria:
 - i) Trench must be closed and restored by the end of working day.
 - ii) Trench width must not exceed 6 ft, and its depth must not exceed 6 ft.
 - iii) Additional ESC practices, as deemed necessary by the Certified RLD, should be employed.
 - iv) The environment must be protected to ensure no sediment will be moved from the construction site.
- d. During construction with dipper-bucket-type equipment, spoils should be placed on the uphill side of the trench (MS 16b) if possible, consistent with construction and safety practices or hauled away to a spoils storage site. If the Certified RLD determines that placing the excavated material on the downhill side of the trench is the safest method and/or if the trench has a sensitive site on the uphill side, the downhill side should be utilized for excavated material placement. If the downhill side is utilized, additional ESC practices, as deemed necessary by the Certified RLD should be employed. The spoil storage site should be

protected with either Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) around the perimeter. Should it be necessary to place spoils on the downhill side of the trench, the spoil pile will be protected with either silt fence or straw bales around the perimeter. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- e. When chain-type trenching equipment is used, deposit the spoils on each side of the trench, if consistent with good and safe construction practices.
- f. Should the trench become filled with water, dewater the trench using a Dewatering Structure (*BMP 3.26*).
- g. Backfill open trenches, as well as splice pits and starting and finishing pits, if applicable, as soon as practical. Backfilling materials and practices shall conform to all applicable regulations.
- h. Compaction of the trench shall be sufficiently performed to meet agency and company compaction requirements. Mound the earth over to compensate for future settlement in non-roadway areas and to prevent the trench from becoming a ditch. This compaction may be accomplished by driving a crawler tractor or a heavy truck over the trench. Trench plugs should be used as needed to control water flow through the trench line. Restoration of sod or other special conditions should be handled on an individual basis, depending on the circumstances involved.
- i. Compaction of the trench in roadway areas shall be sufficiently performed to meet agency and company compaction requirements. Backfill shall be placed in lifts and compacted with compaction equipment necessary to attain agency and/or company compaction requirements. Trench plugs may be used as needed to control water flow through the trench line. Restoration of the surface should match pre-construction conditions without increasing the surface area of imperviousness or other special conditions should be handled on an individual basis, depending on the circumstances involved.
- j. On hillsides and at other locations where there is a danger of washouts eroding the backfill the trench shall be compacted using machine tamping that will help prevent washouts.
- k. Restore the area as outlined in Site Restoration.

Directional Boring

At stream crossings, culverts, road crossings, sensitive resource locations, and any other location determined by engineering requirements, the conduit could be installed using directional boring. Directional bores are bores that can be steered. This procedure allows the bore machine, for example, to sit at ground level or in a shallow pit some distance from the stream or obstacle, to bore down under the stream or obstacle, and to be steered back up to the surface. Boring avoids the need for direct surface disturbance and in-stream water work, and minimizes impacts on associated riparian vegetation or sensitive resource areas. Typically MS 1, MS 2, MS 3, MS 4, MS 6, MS 12, MS 13, MS 14, and MS 19 are applicable to this kind of installation and BMP measures that may be employed include *3.04*, *3.05*, *3.12*, *3.13*, *3.25*, *3.26*, and applicable erosion control measures identified above. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. Although boring many times requires the use of drilling fluids such as water and bentonite (for rock cutting), down slope controls and a Sediment Trap (*BMP 3.13*) will be used at the entrance and/or exit locations of the directional drilling work to control drilling fluids laden with silt and cuttings. Typically these are short-term basins used only for the duration of the drilling operation and are sized based on length of bore and the anticipated quantity of drilling fluid (water) used.

A relatively level area away from possible stream bank overtopping and beyond buffer zones established for the project should be used as a temporary storage area for material excavated for the sending and receiving pits and for drilling entrance and exit sites. Stream, wetland, or other sensitive resources shall be protected using Silt Fence (*BMP 3.05*), Straw Bales (*BMP 3.04*), or Diversions (*BMP 3.12*) installed outside the buffer setback.

- b. The perimeter of stockpiled material shall be protected with Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) around the perimeter.
- c. If dewatering of the sending and receiving pits is required, dewatering using a Dewatering Structure (*BMP 3.26*) is required.
- d. “Frac-outs.” A “Frac-out” is defined as “the condition sometimes encountered during directional boring operations when drilling fluids are inadvertently released into the environment through fractured bedrock or other soil material”. If and when encountered, a “Frac-out” shall be responded to immediately. If a “Frac-out” occurs, THE DRILLING SHALL IMMEDIATELY BE SUSPENDED UNTIL THE PROBLEM IS CORRECTED AND ADEQUATE SEDIMENT CONTROL MEASURES ARE EMPLOYED TO PROTECT ADJACENT PROPERTY AND SENSITIVE RESOURCES IN PROXIMITY TO THE DRILLING SITE. Protection may consist of using Silt Fence (*BMP 3.05*), Straw Bales (*BMP 3.04*), Diversions (*BMP 3.12*) and/or other measures. Drilling shall only resume in a new, deeper bore path not subject to “Frac-out” or after the bore hole has been adequately sealed by pipe sleeving.
- e. Bore pits and sediment traps shall be backfilled and compacted with excavated material after all unstable sediment has been removed and properly disposed of off-site. Restore site as outlined in Site Restoration.

Underground Utility Vaults and Aboveground Utility Pads

- a. Install Silt Fence (*BMP 3.05*) around the perimeter of the construction site. Protect any drainage inlets (*BMP 3.07 and 3.08*) that may receive sediment-laden runoff with Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*).
- b. Clear and grub the construction site. Take precautions to clear and grub only what is necessary.
- c. Excavate the area required for the vault/pad. For an aboveground pad, the spoils should be stockpiled and protected by a Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) around the perimeter. For underground vaults, the spoils should be transported offsite and disposed of properly.
- d. Dewater the excavated area if water seeps or flows into the pit using a Dewatering Structure (*BMP 3.26*).
- e. Backfill, compact, and grade the area surrounding the pad or above the vault. Restore the area as outlined in Site Restoration.
- f. Where buried splice or access handholes need to be opened shortly after installation for cable placement, a temporary extension may be used to bring the opening to the surface. After cable is placed, spliced and tested the extension should be removed, the handhole backfilled and compacted, and the surface restored. Where extensions are used the spoil pile to be used for later backfilling shall be protected with either Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) around the perimeter.

Utility Stream Crossing (*BMP 3.25*)

At all stream crossings, sensitive resource locations, and any other location determined by engineering requirements, the conduit would be installed using directional boring. Directional bores are bores that

can be steered. This procedure allows the bore machine to sit at ground level or in a shallow pit some distance from the stream, to bore down under the stream, and to be steered back up to the surface. Steering avoids the need for direct surface disturbance and in-stream water work, and minimizes impacts on associated riparian vegetation or sensitive resource areas. Stream crossing may also be accomplished using a flume pipe or cofferdam but directional boring is the preferred method. Typically MS 1, MS 2, MS 3, MS 4, MS- 6, MS 12, MS 13, MS 14, MS 15, and MS 19 are applicable to this kind of installation and BMP measures that may be employed include 3.04, 3.05, 3.12, 3.13, 3.22, 3.23, 3.24, 3.25, 3.26, 3.27, and applicable erosion control measures identified above. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. Utility crossings of streams or sensitive areas performed by directional drilling to install telecommunications facilities shall conform to the specifications and requirements described above.
- b. Utility crossings of streams performed by flume pipe methods shall conform to the following specifications and requirements:
 - i. The Certified RLD should determine the location of the culvert(s) and the proper culvert size(s) based upon drainage area, average slope of the watershed, and time in service. This procedure should be used only when in-stream construction will last less than 72 hours and the stream is narrow (less than 10 ft wide), making cofferdam construction impractical.
 - ii. Remove large rocks, woody vegetation, or other materials from the streambed and banks that may get in the way of placing the culvert or installing the telecommunications facilities. Keep clearing and excavating of the streambed and banks to a minimum, and prohibit construction equipment from entering the stream.
 - iii. Install Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) as perimeter measures at the approach areas to control sedimentation.
 - iv. Install filter cloth on the streambed and bank where the culvert will be placed. Filter cloth should cover the streambed and extend a minimum of 6 in. and a maximum of 1 foot beyond the end of the culvert and bedding material. Filter cloth reduces settlement and improves crossing stability.
 - v. Place culvert in the streambed on top of the filter cloth. The invert elevation of the culvert should be the natural streambed grade to minimize interference with fish migration and bed disturbance.
 - vi. Channel the stream flow into the culvert by placing sandbags, timbers, or compacted VDOT #1 coarse aggregate (minimum size). These items act as a barrier and divert the stream flow into the culvert.
 - vii. After diverting the stream flow into the culvert, dewater the work area and stabilize it with aggregate. Dewatering device should discharge into a sediment trapping device or into a well-established area (*BMP 3.13*).
 - viii. When the crossing has served its purpose, remove all structures, including culvert(s), bedding, and filter cloth. Construction equipment should not enter the waterway during structure removal and clean-up of the work area.
 - ix. Immediately upon removing the structure, shape the stream to its original cross-section and properly stabilize it, as well as the stream bank. Restore site as outlined in Site Restoration.

- c. Utility crossings of streams performed by cofferdam methods shall conform to the following specifications and requirements:
- i. The Certified RLD should visit the site to determine the location of the culvert(s) and the proper culvert size(s) based upon drainage area, average slope of the watershed, and time in service. Sensitive areas should be noted, along with any additional ESC measures. This procedure should be used only when stream diversion is not practical and the stream is wide enough (10 ft or wider) to make cofferdam installation practical. Construction should be performed during normal- or low-flow periods.
Install Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) as perimeter measures at the approach areas to control sedimentation.
 - ii. Remove large rocks, woody vegetation, or other materials from the streambed and banks that may get in the way of placing the culvert(s) or installing the telecommunications facilities. Keep clearing and excavating of the streambed and banks to a minimum, and prohibit construction equipment from entering the stream.
 - iii. Form a cofferdam by placing the riprap (or other nonerodible materials) in a semi-circle along the side of the stream in which the utility installation will begin. Cofferdam should be surrounded by and underlain with filter cloth. Stack materials high enough to keep the stream flow from overtopping the cofferdam.
 - iv. After diverting the stream around the cofferdam, dewater the work area and stabilize it with aggregate (VDOT #57 or #68 coarse aggregate) or sand. Dewatering device should discharge into a sediment trapping device or into a well-established area (*BMP 3.13*).
 - v. Install telecommunications facility or line in half the streambed covered by the cofferdam.
 - vi. Remove the cofferdam, and repeat steps iv-vi for the second half of the stream crossing.
 - vii. When the crossing has served its purpose, remove sandbags, aggregate, bedding, and filter cloth. Construction equipment should not enter the waterway during structure removal and clean-up of the work area.
 - viii. Immediately upon removing the structure, shape the stream to its original cross-section and properly stabilize it as well as the stream bank. Restore denuded areas as outlined in Site Restoration.

Temporary Vehicular Stream Crossing (BMP 3.24)

A temporary structural span installed across a flowing watercourse for use by construction traffic is many times necessary to access isolated areas of the work area. Temporary stream crossings are necessary to prevent construction vehicles from damaging stream banks and continually tracking sediment and other pollutants into the flow regime. Typically MS 12, MS 13, MS 14, and MS 15 are applicable to this kind of installation and BMP measures that may be employed include 3.22, 3.23, 3.24, 3.26, 3.27, and applicable erosion control measures identified above. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. Structures may include bridges, round pipes, pipe arches, or oval pipes. The purpose of the temporary vehicle crossing is to provide a means for construction traffic to cross flowing streams without damaging the channel or banks, and to keep sediment generated by construction traffic out of the stream.
- b. Generally applicable to flowing streams with drainage areas less than 1 square mile. Structures which must handle flow from large drainage area should be designed by methods which more accurately define the actual hydrologic and hydraulic parameters which will affect the functioning of the structure.
- c. These structures are undesirable in that they represent a channel constriction which can cause flow backups or washouts during periods of high flow. For this reason, the temporary nature of stream crossings is stressed. They should be in service for the shortest practical period of time and to be removed as soon as their function is completed.
- d. A temporary bridge crossing is a structure made of wood, metal, or other materials, which provides access across a stream or waterway. It is the preferred method for temporary waterway crossings. Normally, bridge construction causes the least amount of disturbance to the streambed and banks when compared to the others types of crossings. They can also be quickly removed and reused. In addition, temporary bridges pose the least chance for interference with fish migration when compared to the others temporary access waterway crossings.
- e. A temporary culvert crossing is a structure consisting of stone and section(s) of circular pipe, pipe arches, or oval pipes of reinforced concrete, corrugated metal or structural plate, which is used to convey flowing water through the crossings. Temporary culverts are used where the channel is too wide for normal bridge construction or the anticipated loading of construction vehicles may prove unsafe for single-span bridges. There is some disturbance within the stream during construction and removal of the temporary culvert crossing. The stone, along with the temporary culverts, can be salvaged and reused.
- f. The temporary waterway crossing shall be at right angles to the stream. Where approach conditions dictate, the crossing may vary 15° from a line drawn perpendicular to the center line of the stream at the intended crossing location.
- g. The centerline of both roadway approaches shall coincide with the crossing alignment centerline for a minimum distance of 50 ft from each bank of the waterway being crossed. If physical or ROW restraints preclude the 50 ft minimum, a shorter distance may be provided. All fill materials associated with the roadway approach shall be limited to a maximum height of 2 ft above the existing flood plain elevation.
- h. Appropriate perimeter controls such as Silt Fence (BMP 3.05) or Turbidity Curtain (BMP 3.27) must be employed when necessary along the banks of the stream parallel to the same.
- i. All crossings shall have one traffic lane. The minimum width shall be 12 ft with a maximum width of 20 ft.

- j. When the crossing has served its purpose, remove sandbags, aggregate, bedding, and filter cloth. Construction equipment should not enter the waterway during structure removal and clean-up of the work area.
- k. Immediately upon removing the structure, shape the stream to its original cross-section and properly stabilize it as well as the stream bank. Restore denuded areas as outlined in Section 2.11, Site Restoration.

Stockpile Protections

Soil stockpiles resulting from trenching operations or excavations for telecommunications vaults or other activities described herein are required to be protected. Typically MS 2 is applicable to this kind of installation and BMP measures that may be employed include 3.04, 3.05, 3.31, and 3.32. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

- a. Select an area suitable for stockpiling the spoils. The area should be relatively level and away from swales, ditches, and watercourses.
- b. Install Silt Fence (*BMP 3.05*) or Straw Bales (*BMP 3.04*) as perimeter measures as soon as practical.
- c. Seed stockpile if stockpile is to remain dormant for more than 14 days. Use temporary seed (annual) mixture if stockpile will remain dormant for more than 14 days and for less than one growing season. Use permanent seed mixture if stockpile will remain dormant for more than one growing season (*BMPs 3.31 and 3.32*).
- d. Dress any sediment deposits remaining in place after disassembling the silt fence. Restore the area after stockpiled material is removed from the site areas as soon as practical as outlined in Site Restoration.

Dewatering Structure (*BMP 3.26*)

A dewatering structure is a temporary settling and filtering device for sediment-laden water that accumulated during construction activities. Dewatering may be necessary in trench construction, excavations for telecommunications vaults, bore pit excavations, and evacuating flooded telecommunications vaults. Relatively sediment-free accumulations may be discharged without any treatment. This BMP is employed to filter sediment-laden water prior to its being discharged offsite. This does not pertain to sediment-laden water containing substances regulated by other agencies, such as petro-chemicals and polychlorinated biphenyl.

- a. A dewatering structure may not be needed if there is a well-stabilized, vegetated area onsite to which water may be discharged. The area must be stabilized so that it can filter sediment and at the same time withstand the velocity of the discharged water without eroding. A minimum filtering length of 75 ft must be available for such a method to be feasible.
- b. The Certified RLD should visit the site to determine the location and proper size required for the dewatering structure. Note sensitive areas, along with any additional ESC measures required to protect these sites.
- c. Store the material from any excavation in a designated area, and protect it in a manner that will prevent sediment from eroding and moving offsite.
- d. Line the excavated basin (applicable to "Straw Bale/Silt Fence Pit") with filter fabric to help reduce scour and to prevent the inclusion of soil from within the structure.
- e. Portable Sediment Tank
 - i. Locate the sediment tank to facilitate easy clean-out and disposal of the trapped sediment and to minimize interference with construction activities.

Determine the required storage volume using the following formula: *pump discharge (gpm) x 16 = cubic feet of storage required.*

- ii. Shut off the pump when the water level nears the top of the tank, while the tank drains and additional capacity is made available.
- iii. Design the tank to allow for emergency flow over the top of the tank.
- iv. Clean out the tank once one-third of its original capacity is depleted because of sediment accumulation. The tank will be clearly marked to show its clean-out point.

f. Filter Box

Using only a filter box allows for minimal settling time for sediment particles; therefore, a filter box should be used only when site conditions restrict the use of other methods.

- i. Construct the box from steel, sturdy wood, or other materials that can handle the pressure requirements imposed by the volume of water. Fifty-five gallon drums welded top to bottom are normally readily available and, in most cases, will suffice.
- ii. Drill holes (or use some other method) in the bottom of the box to make the box porous.
- iii. Place a minimum of 12 in. of VDOT #3 coarse aggregate over the holes (metal “hardware” cloth may need to be placed between the aggregate and the holes if holes are drilled larger than the majority of the stone).
- iv. Direct the discharge, after it leaves the base of the filter box, over a well-vegetated strip that is at least 50 ft long. This is due to the fast rate of flow of sediment-laden water through the aggregate.
- v. Determine the required storage volume using the following formula: *pump discharge (gpm) x 16 = cubic feet of storage required.*
- vi. Shut off the pump once the water level nears the top of the box. This allows the sediment-laden water in the box time to drain.
- vii. Design the box to allow for emergency flow over the top of this box.
- viii. Clean out the box when one-third of its original capacity is depleted because of sediment accumulation. The tank will be clearly marked to show the clean-out point.
- ix. Pull the stones away from the inlet and clean and replace them if the stone filter becomes clogged with sediment so that it no longer adequately performs its function.
- x. Remove the device, and return the area as outlined in Site Restoration.

g. Straw Bale/Silt Fence Pit

- i. The straw bale/silt fence pit method consists of straw bales, silt fence, a stone outlet (a combination of VDOT Class AI riprap and VDOT #25 or #26 aggregate) and a wet storage pit.
Determine the required storage volume using the following formula: *pump discharge (gpm) x 16 = cubic feet of storage required.* In calculating the capacity, include the volume available from the floor of the excavation to the crest of the stone weir.
- ii. Establish the excavated area a minimum of 3 ft below the base of the perimeter measures (straw bales or silt fence).
- iii. Install the perimeter measures. See *BMP 3.05, Silt Fence*.
- iv. Shut off the pump when the water level nears the crest of the stone weir (emergency overflow), while the structure drains down to the elevation of the wet storage.

- v. Dewater the wet storage pit only after a minimum of 6 hours of sediment settling time. Pump the effluent across a well-vegetated area or through a silt fence before it enters a watercourse.
- vi. Remove the accumulated sediment when the wet storage area becomes filled to one-half the excavated depth. Properly dispose of the sediment.
- vii. Remove the device, and return the area as outlined in Site Restoration.

h. Dirtbag®

The Dirtbag® is a trade name for a product manufactured by Atlantic Construction Fabrics, Incorporated. It is a non-woven geotextile fabric sewn together to form a square or rectangular sack. The sediment-laden effluent is pumped into the sack and fabric traps the sand, silt and fines within the sack while allowing relatively sediment-free water to pass through. The Dirtbag® is available in different sizes to fit the site requirements.

- i. Install the bag on a slope so that the incoming water flows downhill through the bag without creating more erosion. Strap the neck of the bag to the discharge hose. To increase the efficiency of filtration, place the bag on an aggregate or straw bale bed to maximize water flow through the surface area of the bag.
The bag is full when it no longer can efficiently filter sediment or pass water at a reasonable rate. Flow rates will vary depending on the size of the bag, the type and amount of sediment discharged into the bag, the type of ground, rock, or other substance under the bag, and the degree of slope on which the bag lies.
- ii. Maximum flow rate under optimal conditions is 1,500 gallons per minute (gpm).
- iii. Dispose of the bag as directed by the Certified RLD. If allowed, the bag may be cut open and contents graded and seeded. Facilitate off-site disposal by placing the bag in the back of a dump truck or flatbed prior to its use, and allow the water to drain from the bag in-place.
- iv. Remove the bag and restore the area as outlined in Site Restoration.

Site Restoration

Site restoration covers the restoration of denuded areas caused by land-disturbing activities associated with the installation of telecommunications facilities. The site should be restored in like-kind. There is no need to lime, fertilize and reseed gravel, rocky or heavily wooded area. When trees and their root masses are removed, lime, fertilize and reseed the denuded areas, unless the property owner requires replacement of removed trees. Remove temporary ESC within 30 days of site stabilization. These measures are to be site-dependent as conditions warrant. Typically MS 1 and MS 3 are applicable to this kind of installation and BMP measures that may be employed include 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, and 3.37. See BMP descriptions in the Virginia Erosion and Sediment Control Handbook.

Permanent vegetation must be established up to one year from construction completion. Seeding of these areas can be accomplished by a variety of methods, such as hydroseeding, tractor-mounted cyclone seeding, and hand seeding.

Permanent soil stabilization shall be applied to denuded areas within 7 days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within 7 days to denuded areas which may not be at final grade, but remain undisturbed for longer than 14 days.

See specific BMP descriptions in the Virginia Erosion and Sediment Control Handbook for surface preparation, seeding, mulching, fertilizer application, and scheduling guidance.

9.0 Inspections

9.01 AT&T ESC Inspection Requirements – 9VAC25-840-60, § 62.1-44.15:58.

Periodic inspections are required on all projects by AT&T. AT&T shall:

Provide for an inspection during or immediately following initial installation of erosion and sediment controls, at least once in every two-week period, within 48 hours following any runoff producing storm event, and at the completion of the project prior to the release of any performance bonds.

9.02 AT&T SWM Inspection Requirements – 9VAC24-870-114, § 62.1-44.15:37.

AT&T (i) shall provide for periodic inspections of the installation of stormwater management measures, (ii) may require monitoring and reports from the person responsible for meeting the permit conditions to ensure compliance with the permit and to determine whether the measures required in the permit provide effective stormwater management, and (iii) shall conduct such investigations and perform such other actions as are necessary to carry out the provisions of this article.

9.03 CGP Permit Holder – SWPPP Inspection Requirements – CGP Part II.F.

9.02.1 Inspection Schedule – CGP Part II.F.2.

9.02.2 TMDL, Exceptional Waters, Impaired Waters Inspection Schedule – CGP Part I.B.4. and 5.

9.02.3 Inspection Requirements – CGP Part II.F.3. and 4.

9.02.4 Corrective Actions – CGP Part II.E.1. and Part II.G.

9.04 ESC Control Measure Inspections – VESCH Chapter 3

AT&T will assign inspection staff suitable for the size of the project, headed by a Construction Supervisor to oversee construction of any project.

- The project will have at least one Environmental Coordinator/Inspector responsible for understanding this plan, the site conditions, and the permit conditions. The Environmental Coordinator/Inspector will review the implementation of this plan and any applicable environmental permits, resolve apparent conflicts between permits and this plan, and coordinate with the Construction Supervisor about additional measures which may be needed to address erosion, sedimentation, and/or stormwater. They will also keep a daily log of activity. The Environmental Coordinator/Inspector will have completed the Inspector requirement as prescribed by the DEQ.
- The inspection staff's responsibilities include:
 - Ensuring compliance with the requirements of this Plan, the environmental conditions, and other environmental permits and approvals;
 - Verifying that the limits of authorized construction work areas and locations of access roads are properly marked before clearing;
 - Verifying the location of drainage and irrigation systems;
 - Identifying stabilization needs in all areas;
 - Locating dewatering structures and slope breakers to ensure they will not direct water into known cultural resource sites or locations of sensitive species;

- Verifying that trench dewatering activities do not result in the deposition of sand, silt, and/or sediment near the point of discharge into a wetland or waterbody. If such deposition is occurring, the dewatering activity shall be stopped and the design of the discharge shall be changed to prevent recurrence;
- Testing subsoil and topsoil in agricultural and residential areas as necessary to measure compaction and determine the need for corrective action;
- Advising the Chief Inspector when conditions (such as wet weather) make it advisable to restrict construction activities;
- Ensuring restoration of contours and topsoil;
- Approving imported soils for use in agricultural and residential areas;
- Ensuring that temporary erosion controls are properly installed and maintained, daily if necessary;
- Inspecting temporary erosion control measures at least:
 - On a daily basis in areas of active construction or equipment operation;
 - On a biweekly basis in areas with no construction or equipment operation; and
 - Within 48 hours of each 0.25 inch of rainfall.
- Ensuring the repair of all ineffective temporary erosion control measures as soon as practical;
- Keeping records of compliance with the environmental conditions and other Federal or state environmental permits during active construction and restoration; and
- Establishing a program to monitor the success of restoration.

10.0 SWPPP Requirements – CGP Part II

10.01 ESC Plan Requirements – CGP Part II.A.2.

10.02 SWM Plan Requirements – CGP Part II.A.3.

10.03 Pollution Prevention Plan Requirements – CGP Part II.A.4.

11.0 Documenting On-Site Changes – CGP Part II.B.

The operator shall amend the SWPPP whenever there is a change in the design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to surface waters and that has not been previously addressed in the SWPPP.

The SWPPP must be amended if, during inspections or investigations by the operator's qualified personnel, or by local, state, or federal officials, it is determined that the existing control measures are ineffective in minimizing pollutants in discharges from the construction activity. Revisions to the SWPPP shall include additional or modified control measures designed and implemented to correct problems identified. If approval by the VESCP authority, VSMP authority, or department is necessary for the control measure, revisions to the SWPPP shall be completed no later than seven calendar days following approval.

The SWPPP must clearly identify the contractor(s) that will implement and maintain each control measure identified in the SWPPP. The SWPPP shall be amended to identify any new contractor that will implement and maintain a control measure.

The operator shall update the SWPPP no later than seven days following any modification to its implementation. All modifications or updates to the SWPPP shall be noted and shall include the following items:

- a. A record of dates when:
 - 1) Major grading activities occur;
 - 2) Construction activities temporarily or permanently cease on a portion of the site; and
 - 3) Stabilization measures installed;
- b. Documentation of replaced or modified controls where periodic inspections or other information have indicated that the controls have been used inappropriately or incorrectly and where modified as soon as possible;
- c. Areas that have reached final stabilization and where no further SWPPP or inspection requirements apply;
- d. All properties that are no longer under the legal control of the operator and the dates on which the operator no longer had legal control over each property;
- e. The date of any prohibited discharges, the discharge volume released, and what actions were taken to minimize the impact of the release;
- f. Measures taken to prevent the reoccurrence of any prohibited discharge; and
- g. Measures taken to address any evidence identified as a result of a required inspection.

On-site changes shall undergo the same internal review process as the original submittal for the SWPPP. If the changes are required to approved ESC and SWM Plans, DEQ will be notified of changes that affect information on the registration statement, permit fee form, and/or permit coverage, and AT&T will be responsible for all applicable fees, including review fees and additional total disturbed acreage fees. Information may be sent to: constructionGP@deq.virginia.gov

12.0 Post-Construction Best Management Practices / SWM Facilities

12.01 Virginia Stormwater BMP Clearinghouse – 9VAC25-870-112

In the case that post-construction BMPs are required for a project, AT&T will provide long-term responsibility for and maintenance of stormwater management facilities and other techniques specified to manage the quality and quantity of runoff. Such requirements will be set forth in an instrument recorded in the local land records prior to state permit termination and will at a minimum:

- a. Be submitted to DEQ for review and approval prior to approval of the SWM Plan;
- b. Be stated to run with the land;
- c. Provide for all necessary access to the property for purposes of maintenance and regulatory inspections;
- d. Provide for inspections and maintenance and the submission of inspection and maintenance reports to DEQ; and
- e. Be enforceable by all appropriate governmental parties.

13.0 Long-Term Maintenance and Agreements – 9VAC25-870-112

Long-term maintenance will be conducted in accordance with the Virginia Stormwater BMP Clearinghouse at <http://www.vwrrc.vt.edu/swc/> and maintenance agreements will be included with the SWM Plan.

14.0 Project Tracking and Notification

14.01 Two week e-notification

Information shall be sent to linearprojects@deq.virginia.gov

The following information needs to be included in the e-notification two weeks prior to initiating a regulated land disturbing activity (LDA):

- i. Project name or project number;
- ii. Project location (including nearest intersection, latitude and longitude, access point)
- iii. On-site project manager name and contact info
- iv. Responsible Land Disturber (RLD) name and contact info
- v. Project description
- vi. Acreage of disturbance for project
- vii. Project start and finish date
- viii. Any variances/exemptions associated with this project.

14.02 E-reporting

Entities may (at DEQ's discretion) be required to provide weekly e-reporting to the department's applicable regional office:

- i. Inspection reports;
- ii. Pictures;
- iii. Complaint logs and complaint responses; and
- iv. Other compliance documents.

14.03 Public Involvement – SWM – CGP Part II.C.

Appendix A: ESC Plan Review Checklist

<http://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/ESCChecklist.docx>

Appendix B: SWM Plan Review Checklist

<http://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/SWMCchecklist.doc>

For all proprietary BMP specifications please provide specific product manufacturer, appropriate design storm, inspection frequency, maintenance, limitations, and other applicable product information. Use of proprietary BMPs may be further reviewed and approved by the applicable DEQ Regional Office on a project-specific basis. This information needs to be included within each project-specific SWPPP.

Appendix C: Inspection Report Form**Comprehensive Construction Site Inspection (ESC and SWM)**

Project Name:		Permit Number (if applicable):	
Project Address:		County/City:	
Project Operator:		Operator Telephone:	
Project Contact:		Contact Telephone:	
Contact E-Mail:		Qualified Personnel (QP):	
Inspector:		Weather (Wet/Dry/Rain):	
Disturbed Acreage:		Inspection Date & Time:	

NATURE OF PROJECT:

☐ Construction/installation ☐ Maintenance ☐ Other: _____

STAGE OF CONSTRUCTION:

☐ ESC Control Installation ☐ Clearing & Grading ☐ Excavation ☐ Construction of SWM Facilities

☐ Rough Grading ☐ Final Grading ☐ Final Stabilization ☐ Other: _____

		Yes	No	N/A	Comments/Description
	ESC Requirements				
1	Stabilization (MS -1, -2, -3, -5, -15)				
2	MS -16 Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria: a. No more than 500 linear feet of trench may be opened at one time. (unless a variance has been approved) b. Excavated material shall be placed on the uphill side of trenches. c. Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site property. d. Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote stabilization. e. Restabilization shall be accomplished in accordance with this chapter. f. Applicable safety requirements shall be complied with.				
3	Roads, paved surfaces (MS -17)				
4	Inlet and Outlet Protection (MS -10, -11,)				

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	ESC Requirements (Cont.)	Yes	No	N/A	Comments/Description
5	Stream Crossings (MS -13, -14)				
6	Sediment Traps (MS -4)				
7	Sediment Basins (MS -6)				
8	Channels (MS -8)				
8	Stormwater Standard (MS -19)				
9					
10					
	SWM Requirements				
11	Earthen Embankments				
12	Principal Spillways				
13	Vegetated Emergency Spillway				
14	Sediment Forebay				
15	Landscaping				
16	Retention Basins				
17	Extended Detention Basins				
18	Detention Basins				
19	Constructed Wetlands				
20	Infiltration Practices				
21	Bio-Retention				
22	Sand Filters				
23	Grassed Swale				
24	Vegetated Filter Strip				
25	Manufactured BMP Systems				
26	Good Housekeeping				

27	Waste Management				
28					
29					

I certify that the facility or site is in compliance with the approved Annual Standards and Specifications, Erosion and Sediment Control Plans, Stormwater Management Plans, Stormwater Pollution Prevention Plans, and/or the General VPDES Permit No. VAR10.

I further certify that I am authorized to sign this report under Virginia Administrative Codes at 9VAC25-880-70 Part III K (relating to Signatory Requirements) and 9VAC25-850 (relating to Certification).

Signed: _____ Name and Title Date: _____

Appendix D: Land Disturbance and Project Tracking Sheet

AT&T will report the overall land-disturbing activities to DEQ on a quarterly basis in the Annual Standards and Specifications submission.

[illegible]

Appendix E: Erosion and Sediment Control Measures

a. Virginia Erosion and Sediment Control Handbook – Chapter 3 State Minimum Standards and Specifications

<http://www.deq.virginia.gov/programs/water/stormwatermanagement/publications/eschandbook.aspx>

The use of Virginia Erosion and Sediment Control Handbook (VESCH), along with accompanying technical documents and guidance, control measures is strongly preferred. Non-VESCH control measures, best management practices (BMP), and specifications may be included in the Annual Standards and Specifications submission but their use may be further reviewed and approved by the applicable DEQ Regional Office on a project-specific basis.

For all non-VESCH and proprietary control measures, please include all applicable practical information including definition, purpose, conditions where practice applies, planning considerations, design criteria, construction specifications, design tables and plates, and maintenance and inspections. Non-VESCH and proprietary control measures shall be installed per the manufacturer's instructions and with the intent of the VESCH specifications. Should non-VESCH control measures fail to effectively control soil erosion, sediment deposition, and non-agricultural runoff, then VESCH control measures shall be utilized.

b. ESC Technical Bulletin No. 4 – Nutrient Management for Developed Sites

Appendix F: Erosion and Sediment Control Measures Maintenance